

Abstract

An integrated biomolecule sensor comprising a plurality of optical fibers whose proximal ends are held together with the end-faces arranged substantially in the same plane and oriented substantially in the same direction and which have probe polymers with different base sequences bound to the core end-face at their distal ends. The method and apparatus for fabricating the integrated biomolecule sensor, and the method and apparatus for detecting biomolecules using the integrated biomolecule sensor are also disclosed. Researchers can make their own sensors best suited for individual requirements, and detect the presence of target biomolecules quickly, without need of expensive equipment.

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